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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/447,378	,378 11/23/1999		RYUJI NISHIKAWA	005586-20019	3746
26021	7590	08/23/2004		EXAMINER	
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SUITE 1900	)	•		ART UNIT	PAPER NUMBER
LOS ANGE	ELES, CA	90071-2611		2871	
				DATE MAILED: 08/23/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	09/447,378	9/447,378 NISHIKAWA ET AL.					
Office Action Summary	Examiner	Art Unit	)				
	Mike Qi	2871	pr				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence add	dress				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely, the mailing date of this con D (35 U.S.C. § 133).	mmunication.				
Status							
1) Responsive to communication(s) filed on <u>01 Ju</u>	<u>une 2004</u> .						
2a) This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.						
3) Since this application is in condition for allowar closed in accordance with the practice under E			merits is				
Disposition of Claims							
4) ☐ Claim(s) 1-5,10,11,15-17,19,20,24,25 and 39 is 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) 1-5,10,11,15-17,19,20,24 and 39 is/as 6) ☐ Claim(s) 25 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or contents.	wn from consideration. re allowed.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10)☐ The drawing(s) filed on is/are: a)☐ acc	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correct  11) The oath or declaration is objected to by the Ex							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National S	Stage				
Attachment(s)	•						
1) Notice of References Cited (PTO-892)	4) Interview Summary						
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6/1/04.</li> </ol>	Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:		-152)				

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#### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 1, 2004 has been entered.

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 25 is rejected under 35 U.S.C. 102(e) as being anticipated by US 6,097,466 (Koma).

Claim 25, Koma discloses (col.2, line 56 – col.3, line 3; col.3, line 66 – col.5, line 56; col.7, line 54 – col.9, line 4; Figs.1-2) a liquid crystal display device comprising:

- liquid crystal layer (40) is sealed between the first substrate (10) and the opposed substrate (30);

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the first substrate (10) has switching elements (TFTs) connected to gate signal lines (12L) and drain signal lines (18L), and the pixel electrodes (26) which are connected to the TFTs through contact hole and made of Al (metal) conductive material (col.5, lines 2-4), and a vertical alignment film (28) for orienting the liquid crystal (col.5, lines 34-38);

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- the second substrate (30) has an opposing common electrode (32) which has alignment control window (34) at position overlapping with the pixel electrodes (26) to control the orientation of the liquid crystal and a vertical alignment film (28) for orienting the liquid crystal (col.7, line 54 co.8, line 46; Fig.2);
- the drain signal lines (18L) are disposed on the first substrate (10) at positions that overlap with the alignment control window (34) (see Fig.1);
- the alignment control window (34) has a width different from the drain signal line (18L) (see the Fig.1 looks the width of the orientation control window is different from the drain line).

# Allowable Subject Matter

- 3. Claims 1-5,10-11,15-17,19-20, 24 and 39 are allowed.
- 4. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record neither discloses nor teaches a liquid crystal display device comprising various elements, more specifically, as the following:

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light-shielding film is disposed to overlap with boundaries of the orientation direction of the liquid crystal formed by the orientation divider, and the light-shielding film overlapping the orientation divider along the extension direction of the orientation divider as shown in Fig.4 [claims 1,11,15 and 20];

the drain signal lines are disposed to overlap the orientation control window's extension region along the longitudinal direction of the extension region as shown in Fig.4 [claim 24];

a light-shielding film is disposed to overlap the orientation divider along the extension direction of the orientation divider as shown in Fig.4 [claim 39].

The closest references AAPA, US 6,097,466 (Koma) and US 6,157,428 disclose a structure of a liquid crystal using alignment control window to divide the orientation direction in a pixel electrode region so as to enlarge the viewing angle display, but the prior art of record do not disclose the arrangement for the alignment control window in which the drain signal lines functions as a light-shielding film is disposed to overlap the orientation divider along the extension direction of the orientation divider as shown in Fig.4 so as to increase the contrast ratio. The other reference such as US 6,456,352 (Matsuyama et al) discloses that using control electrode as an orientation control electrode surrounds the periphery of the pixel electrode, but the structure is different from the orientation divider of this application. Most close references found have a common assignee or same inventor having different claims.

# Response to Arguments

5. Applicant's arguments filed on June.1, 2004 have been fully considered but they are not persuasive.

# Applicant's arguments are as follows:

1) The reference Koma'466 is common owned with the present application. The rejection of claim 25 under 102(e) is inappropriate.

#### Examiner's responses to Applicant's arguments are as follows:

1) The reference Koma '466 has a filing date of Nov.17, 1998 that is earlier than the priority date of Nov.27, 1998 of the present application. Therefore, the reference Koma'466 is a 102(e) reference, and the inventor is different from the inventor, Ryuji Nishikawa, of the present application that constitutes a different inventor's entity.

#### Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (571) 272-2299. The examiner can normally be reached on M-T 8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Qi August 17, 2004

ARIFUR R. CHOWDHURY
PRIMARY EXAMINER

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